



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------|------------------|
| 10/764,016 | 01/23/2004 | David Fikstad | 23625.CON | 8956 |
| 20551 7590 12/19/2006 THORPE NORTH & WESTERN, LLP. 8180 SOUTH 700 EAST, SUITE 200 SANDY, UT 84070 | | | EXAMINER ROYDS, LESLIE A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1614 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 12/19/2006 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/764,016 | Applicant(s) FIKSTAD ET AL. | |
| | Examiner Leslie A. Royds | Art Unit 1614 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,13-24,29-33 and 37-65 is/are pending in the application.
- 4a) Of the above claim(s) 44-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,13-24,29-33 and 37-43 is/are rejected.
- 7) ☒ Claim(s) 2,31,37 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>10 October 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-2, 13-24, 29-33 and 37-65 are presented for examination.

A request for continued examination under 37 C.F.R. 1.114, including the fee set forth in 37 C.F.R. 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 C.F.R. 1.114, and the fee set forth in 37 C.F.R. 1.17(e) has been timely paid, the finality of the previous Office Action has been withdrawn pursuant to 37 C.F.R. 1.114. Applicant's payment and submission filed September 20, 2006 has been received and entered into the present application. Accordingly, prosecution has been reopened.

Claims 1-2, 13-24, 29-33 and 37-65 are pending and are under examination. Claims 3-12, 25-28 and 34-36 are cancelled and claims 37-65 are newly added. Claims 1 and 32-33 are amended.

Applicant's summary of the Interview held August 3, 2006 with Examiner Royds, SPE Marschel and Attorneys David Osborne and Todd Alder has been received and entered into the present record.

Applicant's Information Disclosure Statement (IDS) filed October 10, 2006 has also been received and entered into the present application. As reflected by the attached, completed copy of form PTO/SB/08A (one page), the Examiner has considered the cited references.

Applicant's arguments, filed September 20, 2006, have been fully considered. Applicant's statement that the instant application and the '192 patent were subject to common ownership at the time of the invention has been noted. Accordingly, the rejection set forth under 35 U.S.C. 103(a) is properly withdrawn since the '192 patent is no longer available as prior under the provisions of 35 U.S.C. 103(c). Rejections and objections not reiterated from previous Office Actions are hereby withdrawn. The following rejections and objections are either reiterated or newly applied. They constitute the complete set of rejections and objections presently being applied to the instant application.

Withdrawal of Newly Added Claims 44-65: Election by Original Presentation

Applicant's amendment to add new claims 44-65 has been carefully considered in light of the subject matter that was elected and examined in the previous non-final and final Office Actions.

The MPEP states at §819:

“The general policy of the Office is not to permit the Applicant to shift to claiming another invention after an election is once made and action given on the elected subject matter.”

Newly submitted claims 44-65 are directed to an independent and patentably distinct invention from the invention originally claimed for the following reason: newly added claims 44-65 are directed to a method of synchronizing the release of a drug and a solubilizer comprising the co-administration of a release modulator with a formulation of the drug and solubilizer, whereas the claims as originally filed were directed to a pharmaceutical composition comprising a drug, solubilizer and a release modulator, wherein the release of the drug and the solubilizer were synchronized.

The inventions are independent or distinct because they are related as a process of making and product made and can be shown to be distinct if: (1) the process as claimed can be used to make another and materially different product or (2) the product as claimed can be made by another and materially different process. Please reference MPEP §806.05(f). In the instant case, the claimed pharmaceutical composition may be produced by any one of a variety of conventional methods known in the art, such as first melting the solubilizer component and the release modulating component, then dissolving the active drug component into the molten solubilizer/release modulator mixture and integrating the components by subjecting the molten combination to mixing using a high shear rotor-stator homogenizer or vortex mixer.

Since Applicant has received an action on the merits for the originally present invention directed to the pharmaceutical composition, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 44-65 are withdrawn from consideration as being directed to a non-elected invention. Please see 37 C.F.R. 1.142(b) and MPEP §821.03. As stated in the

Art Unit: 1614

MPEP at §818.02(a), "The claims originally presented and acted upon by the Office on their merits determine the invention elected by an Applicant in the application, and in any request for continued examination (RCE) which has been filed for the application. Subsequently presented claims to an invention other than that acted upon should be treated as provided in MPEP §821.03."

Objection to the Claims (New Grounds of Objection)

Claim 2 is objected to because the drug ---simvastatin--- is misspelled at line 2 of the claim as "simivastatin".

Claim 31 is objected to because the drug ---amiodarone--- is misspelled at line 2 of the claim as "amiodoarone".

Claim 37 is objected to for reciting "an acrylic polymer a high molecular weight polysaccharide gum", which is grammatically awkward. Applicant may wish to consider amending the claim with a comma inserted between the words "polymer" and "a" to read ---an acrylic polymer, a high molecular weight polysaccharide gum--- for clarity.

Claim 40 is objected to for reciting "a acrylic polymer", which is grammatically awkward. Applicant may wish to consider amending the claim to properly read on ---an acrylic polymer--- for clarity.

Claim Rejections - 35 USC § 112, First Paragraph, Written Description Requirement

(New Grounds of Rejection)

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-2, 13-24, 29-33 and 43 are rejected under 35 U.S.C. 112, first paragraph, as failing to

Art Unit: 1614

comply with the written description requirement. The claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Present claim 1, and the claims dependent therefrom, read upon a pharmaceutical composition comprising a therapeutically effective amount of a drug; a solubilizer selected from the group consisting of polyoxyl 40 castor oil, polyoxyl 35 castor oil, etc. (claim 1, lines 3-11); and a release modulator which synchronizes the release of the drug and the solubilizer.

In particular, the specification as originally filed fails to provide adequate written description for the claim limitation directed to “a release modulator which synchronizes the release of the drug and the solubilizer” (claim 1).

Applicant has amended the claim from “a release modulator” to now read upon the use of “a release modulator which synchronizes the release of the drug and the solubilizer”. Such an amendment now limits the genus of “release modulators” only to those that are capable of performing the function of synchronizing the release of the drug and the solubilizer. In other words, Applicant’s claims are now directed to a genus described in terms of a required function (i.e., release synchronization of drug and solubilizer).

MPEP §2163 recites, “The written description requirement for a claimed genus may be satisfied through sufficient description of a representative number of species by actual reduction to practice, reduction to drawings, or by disclosure of relevant identifying characteristics, i.e., structure or other physical and/or chemical properties, by functional characteristics coupled with a known or disclosed correlation between function and structure, or by a combination of such identifying characteristics, sufficient to show the Applicant was in possession of the claimed genus.” Please reference *Eli Lilly*, 119 F.3d at 1568, 43 USPQ2d at 1406.

Regarding the limitation of “a release modulator which synchronizes the release of the drug and

Art Unit: 1614

the solubilizer” (claim 1), the broad genus of “release modulators” capable of performing this function of synchronizing the release of both the drug and the solubilizer embraces widely variant species, including but not limited to, devices (e.g., osmotic pumps), slowly dissolving salts or complexes, hydrolysable esters, erodible matrices (e.g., polyamides), polyesters, ion exchange resins, waxes (e.g., yellow wax, white wax, carnauba wax, cetyl ester wax), fatty acids or fatty alcohols (e.g., hydrogenated vegetable oils, lauroyl macrogol-32 glycerides), tocol derivatives (e.g., mono-, di- or tri-methyl tocols, PEG-ylated tocols) or polymeric materials (e.g., cellulose, vinyl polymers, acrylic polymers, methacrylate polymers, polyvinylpyrrolidone copolymers, polysaccharide gums, glycuronan polymers, etc.). Please see the specification at page 14, line 17-page 16, line 6. It has been held that when there is substantial variation within the genus, one must describe a sufficient variety of species to reflect the variation within the genus.

The instant specification provides a non-limiting definition and description of a variety of release modulators that Applicant states are known to those of ordinary skill in the art and are encompassed by the present claims. However, the specification does not provide disclosure of relevant identifying characteristics, such as a structure or other physical or chemical properties, or functional characteristics beyond the generic disclosure of synchronizing release of the drug and the solubilizer that is sufficient to demonstrate that Applicant was in possession of the entire genus of release modulators capable of synchronizing the release of both the drug and the solubilizer. Please see *Eli Lilly*, 119 F.3d at 1568, 43 USPQ2d at 1406 and MPEP §2163.

While it is duly noted that the genus of “release modulators” is limited to those ‘release modulators’ capable of synchronizing the release of the drug and the solubilizer, it remains that Applicant has not appropriately defined the metes and bounds of the genus, even when limited by function (step-plus-function form). MPEP §2163 teaches that step-plus-function claims are adequately described if “the written description adequately links or associates adequately described particular structure, material, or acts to the function recited in a step-plus-function claim limitation,” or if “it is clear based on the facts of

Art Unit: 1614

the application that one skilled in the art would have known what structure, material, or acts perform the function recited in a step-plus-function limitation.” The instant application does not meet either of these criteria. The present specification provides no disclosure beyond the exemplary release modulators, of which only a few species of each type are disclosed, that would provide a means for identifying materials, other than those specifically disclosed by Applicant, that would have been amenable for use in the present invention, nor does it teach the specific structure, physical properties or a method of identification of such compounds that perform the function recited in the claim. Furthermore, it has been held that a wish or plan for obtaining the chemical invention as claimed does not provide adequate written description of a chemical invention. Rather, a precise definition, such as by structure, formula, chemical name or physical properties, is required. Please reference, e.g., *Univ. of Rochester v. G.D. Searle & Co.*, 358 F.3d 916, 927, 69 USPQ2d 1886, 1894-95 (Fed. Cir. 2004).

While it is recognized that adequate written description of a limitation is not required to be stated *in haec verba* in the specification or claims as originally filed, adequate written support for claim limitations must arise from either an explicit or implicit suggestion by the disclosure to show that such a concept as claimed was actually in possession of Applicant at the time of the invention. For the reasons provided *supra*, Applicant has failed to provide the necessary teachings, by describing the claimed invention with all of its limitations using such descriptive means that fully set forth the claimed invention, in such a way as to reasonably convey to one skilled in the relevant art that Applicant had possession of the entire genus of release modulators capable of synchronizing the release of the drug and the solubilizer.

Accordingly, the claims are considered to lack sufficient written description and are properly rejected under 35 U.S.C. 112, first paragraph.

Claim Rejections - 35 USC § 112, Second Paragraph (New Grounds of Rejection)

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 1614

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 13-24, 29-33 and 37-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Present claim 1 is directed to a pharmaceutical composition comprising a therapeutically effective amount of a drug, a solubilizer selected from the group consisting of polyoxyl 40 castor oil...caprylic acid mono/diglycerides, and mono- and diacetylated monoglycerides, linoleoyl monoglycerides...alpha-tocopherol polyethyleneglycol (200-8000 MW) succinate...and d-alpha-tocopherol polyethyleneglycol 1000 succinate; and a release modulator which synchronizes the release of the drug and the solubilizer.

In particular, it is noted that the limitation "caprylic acid mono/diglycerides, and mono- and diacetylated monoglycerides" renders the scope of the claim indefinite because it is unclear whether the claim intends to encompass the use of caprylic acid monoglycerides, caprylic acid diglycerides, caprylic acid monoacetylated monoglycerides or caprylic acid diacetylated monoglycerides or whether the claim intends to encompass the use of caprylic acid monoglycerides, caprylic acid diglycerides, monoacetylated monoglycerides or diacetylated monoglycerides. In other words, the manner in which the claim is written does not clearly set forth whether the limitation "mono- and diacetylated monoglycerides" is intended to modify the preceding limitation of "caprylic acid mono/diglycerides" or whether it is intended to stand alone as a separate and distinct type of solubilizer. For these reasons, one of ordinary skill in the art would not have been reasonably apprised of the metes and bounds of the subject matter for which Applicant is seeking protection.

Further, it is noted that present claim 1 recites the use of the solubilizer "alpha-tocopherol polyethyleneglycol (200-8000 MW) succinate". The recitation of the parenthetical limitation "(200-8000 MW)" renders the scope of the claims indefinite because Applicant has failed to delineate how this limitation is intended to limit the claim. For example, it is not clear whether this limitation is meant to

Art Unit: 1614

restrict the alpha-tocopherol polyethyleneglycol succinate compound only to those that are of molecular weights 200-8000 or whether such molecular weights are intended to be exemplary of the types that may be employed within the presently claimed pharmaceutical composition. For these reasons, one of ordinary skill in the art would not have been reasonably apprised of the scope of alpha-tocopherol polyethyleneglycol succinate compounds that Applicant intends to presently claim.

For these reasons, the claims fail to meet the tenor and express requirements of 35 U.S.C. 112, second paragraph, and are, thus, properly rejected.

Claims 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Present claim 17 is directed to "The pharmaceutical composition of claim 1, wherein the period of time is about 1 hour or more." Present claims 18-19 are substantially the same, except "the period of time is about 2 hours or more" in present claim 18 and "2 hours to about 24 hours" in present claim 19.

There is insufficient antecedent basis for the limitation "the period of time" as it appears in present claims 17-19, since any reference to such a period of time in the claim from which it depends (i.e., claim 1) is noticeably absent. It is unclear how Applicant intends claims 17-19 to limit the presently claimed subject matter. As a result, the claims fail to meet the tenor and express requirements of 35 U.S.C. 112, second paragraph, and are, thus, properly rejected for rendering the scope of the claim indefinite.

For the purposes of examination and the application of prior art, present claims 17-19 will be interpreted to read upon present claim 16.

Claim 43 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Art Unit: 1614

Present claim 43 is directed to the pharmaceutical composition of claim 26, "wherein the solubilizer is d-alpha-tocopherol polyethyleneglycol 1000 succinate, the release modulator is alpha-tocopherol succinate."

In particular, present claim 43 is dependent upon a cancelled claim (i.e., claim 26). Accordingly, the scope of the claim is indefinite because the claim does not clearly set forth the subject matter that it is intended to further limit. Furthermore, claim 43 could conceivably further limit the subject matter of several of the presently pending claims, including, but not limited to, present claims 1, 32-33 or 42. Accordingly, the metes and bounds of the subject matter for which Applicant is presently seeking protection is not clearly and precisely set forth.

Furthermore, the lack of a conjunction between the limitation "wherein the solubilizer is d-alpha-tocopherol polyethyleneglycol 1000 succinate" and the limitation "the release modulator is alpha-tocopherol succinate" does not clearly delineate whether both limitations are intended to occur simultaneously, i.e., in the same pharmaceutical composition, or if they are intended to occur in the alternative, i.e., either the solubilizer is d-alpha-tocopherol polyethyleneglycol 1000 succinate or the release modulator is alpha-tocopherol succinate is present in the pharmaceutical composition.

For these reasons, the claims fail to meet the tenor and express requirements of 35 U.S.C. 112, second paragraph, and are, thus, properly rejected.

For the purposes of examination, the claim will be interpreted as being dependent upon claim 1, wherein either the solubilizer is d-alpha-tocopherol polyethyleneglycol 1000 succinate *or* the release modulator is alpha-tocopherol succinate.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1614

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 13-16, 20-24, 29-33, 37 and 41-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Patel et al. (U.S. Patent No. 6,294,192; Issued September 2001, Filed February 1999) in light of Stedman's Medical Dictionary (1972; pages 595 and 1400), cited to show a fact, each already of record, for the reasons of record set forth at pages 6-9 of the previous Office Action dated April 20, 2006, of which said reasons are herein incorporated by reference.

Regarding newly added claims 37 and 43, claims 37 and 43 are properly included in the present rejection because Patel et al. teaches the use of tocopherol polyethyleneglycol (PEG) 1000 succinate suitable for use as a surfactant in the disclosed pharmaceutical composition (col.11, lines 11-15). Though Patel et al. does not expressly recognize the "release modulating" property of tocopherol PEG-1000 succinate as noted by Applicant, it has been held that identical chemical entities cannot have mutually exclusive properties. Accordingly, whatever release modulating properties Applicant has attributed to tocopherol PEG-1000 succinate are necessarily present in the tocopherol PEG-1000 succinate compound of Patel et al., absent factual evidence to the contrary. Please reference MPEP §2112.01. Furthermore, the claims do not preclude the use of the same chemical agent as both the solubilizer and the release modulator. In fact, Applicant states at page 16, "Many release modulators can additionally serve as solubilizers for the drug either in the pharmaceutical composition or in aqueous dispersion (also act as a solubilizer, as defined in the previous section). *Similarly, many solubilizers can additionally serve as release modulators for the drug either in pharmaceutical composition or in aqueous dispersions* (also act as a release modulator, as defined above)." (emphasis added)

Regarding newly added claim 41, claim 41 is properly included in the present rejection because Patel et al. teaches the use of stearyl macroglycerides (col.9-10, Table 5; also known as GELUCIRE

Art Unit: 1614

50/13) and calcium stearoyl lactylate (col.19, Table 18) suitable for use as surfactant components of the disclosed pharmaceutical composition. Though Patel et al. again does not expressly teach the “release modulating” property of the stearoyl macrogolglycerides or the calcium stearoyl lactylate as noted by Applicant, chemical entities cannot have mutually exclusive properties and, therefore, whatever release modulating properties that Applicant has attributed to these compounds are necessarily present in Patel et al., absent factual evidence to the contrary. Please reference MPEP §2112.01.

Regarding newly added claim 42, claim 42 is properly included in the present rejection because Patel et al. teaches a generic pharmaceutical composition comprising a hydrophobic therapeutic agent and a carrier (comprised of at least one hydrophobic surfactant and at least one hydrophilic surfactant; col.4, line 65-col.5, line 4), and further wherein the composition may contain a solubilizer that enhances the solubility of the overall composition of the hydrophobic therapeutic agent in the carrier system (col.25, lines 14-col.16, line 14). Patel et al. teaches the use of tocopherol polyethyleneglycol (PEG) 1000 succinate suitable for use as a surfactant in the disclosed pharmaceutical composition (col.11, lines 11-15), which places the use of either the racemic or either enantiomeric form (d- or l-) of tocopherol PEG-1000 succinate clearly within the possession of the public. Patel et al. also teaches the use of hydroxypropylmethylcellulose (col.25, lines 25-26) as a preferred solubilizer for use in the disclosed pharmaceutical composition. Though Patel et al. does not expressly recognize the “solubilizing” or “release modulating” properties of the tocopherol or the cellulose component of the composition, the very teaching of the identical chemical entity clearly indicates that whatever solubilizing or release modulating properties that Applicant has attributed to either of these compounds are necessarily present, absent factual evidence to the contrary. As previously stated *supra*, chemical compounds cannot have mutually exclusive properties. Please reference MPEP §2112.01.

Applicant states that, “The ‘192 Patent does not teach a composition with a release modulator or any other ingredient that is taught or suggested to have the ability to synchronize release of a drug and a

Art Unit: 1614

solubilizer that are contained in the same dosage formulation. As such, the '192 patent does not teach each and every element of the present invention. Even assuming, *arguendo*, that the '192 Patent did coincidentally teach compositions having release rate modulators, the presently pending claims have been amended so as to set forth specific solubilizers with which the release modulators can effectively perform such function. Teachings or suggestions of combinations that achieve such properties are clearly not found in the '192 patent." (page 14 of Applicant's remarks)

Applicant's traversal has been carefully considered in its entirety, but fails to be persuasive.

Initially, it is noted that a prior art reference may still properly anticipate a composition claim so long as the reference expressly discloses the same physical components and structural characteristics of the claimed composition. For a proper conclusion of anticipation over the prior art, it is not necessary that the prior art reference be aware of the same functional properties of the physical components that Applicant may have subsequently newly discovered. The fact that a prior art publication teaches a composition of identical physical components and identical structural configuration is adequate disclosure to anticipate the claim. Though Applicant may have recognized an additional advantage from making the identical combination of components with an identical structural configuration, it is the very fact that the prior art expressly teaches and acknowledges the therapeutic benefit of making the same combination that supports the conclusion of anticipation. The explanation of an effect or functional property, while it is no doubt an important contribution to the scientific literature, cannot be the basis for patentability when the art was already aware of an advantage (despite the fact that it may not be identical to the advantage that Applicant has discovered) of producing a pharmaceutical composition comprising identical physical and structural properties.

In other words, Patel et al. may not expressly acknowledge the "release modulating" properties of the disclosed components (e.g., propylene glycol, cyclodextrins, polyvinylpyrrolidone, polyamides, etc.). However, the fact that the reference explicitly sets forth chemical entities identical in scope to the release

Art Unit: 1614

modulator(s) that Applicant has either expressly claimed or implicitly claimed by the recitation of the genus of "release modulators which synchronizes the release of the drug and the solubilizer" and the specific species (see, e.g., claim 37) clearly indicates that these release modulating properties, i.e., synchronization, are necessarily present in the components taught by Patel et al. For example, the fact that Patel et al. may have been unaware that the inclusion of the compound tocopherol PEG-1000 succinate into a pharmaceutical composition further comprising a hydrophobic therapeutic agent (i.e., drug) was capable of synchronizing the release of both the drug and solubilizer does not negate the conclusion of anticipation. Patel et al. clearly teaches the physical and structural elements of the claim and, therefore, whatever unexpected therapeutic advantage, such as, in the present case, the synchronized release of both the drug and the solubilizer, is inherently present in the reference. As stated previously, products of identical chemical composition cannot exert mutually exclusive properties. Please reference MPEP §2112.01.

The claims in their simplest form require a therapeutically effective amount of a drug, a solubilizer selected from the group consisting of polyoxyl 40 castor oil, polyoxyl 35 castor oil, etc. and a release modulator which synchronizes the release of the drug and the solubilizer into the structural configuration of a pharmaceutical composition. This is met both by the broad teachings of Patel et al. and also by the exemplified compositions of Patel et al., which clearly demonstrate that the patentee was in possession of specific embodiments of the disclosed composition that contained both a surfactant, such as Incrocas 35 (also known as PEG-35 castor oil; see Table 19 at col.31-32), a hydrophobic therapeutic agent (i.e., cyclosporine) and Gelucire 44/14 (also known as lauroyl macrogol-32 glycerides; see Table 5 at col.9-10), which meets each and every limitation of the claim. Please reference Example No. 57, for example, at col.44 of Patel et al. Absent factual evidence to the contrary, the lauroyl macrogol-32 glyceride component would serve to modulate the release of the active agent due to its polymeric and highly viscous nature. Applicant corroborates this conclusion at page 15 of the present specification,

Art Unit: 1614

where it expressly defines the term “release modulator” as including, for example, the compound lauroyl macrogol-32 glycerides. Please see page 15, lines 14-31 of the specification. In light of such teachings, Applicant’s allegation that Patel et al. does not teach the claimed composition is clearly not persuasive.

In further response to Applicant’s submission that Patel et al. does not teach the claimed combinations, Applicant is reminded that the broader disclosure of the cited reference is directed to the inventive concept of the delivery vehicle as a combination of, at least, a hydrophobic therapeutic agent and a carrier comprising a hydrophilic and hydrophobic surfactant, further in combination with a solubilizer. Accordingly, Patel et al. emphasizes that any combination of the disclosed hydrophobic therapeutic agents, hydrophilic and hydrophobic surfactants and solubilizers may be made and still be within the metes and bounds of the invention disclosed in the reference. In other words, Patel et al. clearly teaches the genera of hydrophobic therapeutic agents, hydrophilic and hydrophobic surfactants and solubilizers as being substantial equivalents of one another such that they are essentially interchangeable to comprise a variety of different combinations. Therefore, though Patel et al. may not reduce the disclosure to each and every discrete combination of agents identical to those presently claimed by Applicant, such does not negate the broader teachings of the reference as a whole, which, as stated *supra*, clearly overlaps with and/or encompasses the claimed subject matter such that a proper conclusion of anticipation has been made.

Furthermore, Applicant is reminded that the comprehensiveness of a disclosure does not constitute a teaching away from the claimed subject matter when the species under consideration are expressly named in the reference. Applicant’s attention is directed to the MPEP at §2131.02 (see “A Reference That Clearly Names the Claimed Species Anticipates the Claim No Matter How Many Other Species Are Named”), which states, “A genus does not always anticipate a claim to a species within the genus. However, when the species is clearly named, the species claim is anticipated no matter how many other species are additionally named. *Ex parte A*, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990) (The

Art Unit: 1614

claimed compound was named in a reference which also disclosed 45 other compounds. The Board held that the comprehensiveness of the listing did not negate the fact that the compound claimed was specifically taught. The Board compared the facts to the situation in which the compound was found in the Merck Index, saying that 'the tenth edition of the Merck Index lists ten thousand compounds. In our view, each and every one of those compounds is described' as that term is used in 35 U.S.C. 102(a), in that publication.'). Id. at 1718. See also *In re Simvaramakrishnan*, 673 F.2d 1383, 213 USPQ 441 (CCPA 1982)."

Lastly, it is again noted, for clarity of the record, that Applicant's submission under 37 C.F.R. 1.131 in the after-final amendment dated June 23, 2006 has been considered as stated in the Advisory Action of August 10, 2006. The Declaration under 37 C.F.R. 1.131 is a proper submission to overcome the prior art rejection as set forth under 35 U.S.C. 102(e). However, Applicant's statement and evidence made of record is insufficient to demonstrate that the entire scope of the claimed subject matter was conceived and reduced to practice prior to that of the '192 patent reference. In particular, it is noted that the declaration under 37 C.F.R. 1.131 is directed to a discrete combination of itraconazole, glycofurol, Tween-20, phosphoric acid, ethanol, sodium taurocholate and polyvinylpyrrolidone, which is but a very small scope of evidence as compared to the breadth of what is claimed in the Patel ('192) patent reference. In light of such, while the declaration is again noted to be an appropriate submission in order to overcome the prior art rejection, the evidence demonstrated in the declaration is, respectfully, insufficient to establish on the record that Applicant had conceived and reduced to practice the entire scope of what is presently claimed as compared to the invention of the prior art.

For these reasons, and those set forth at pages 6-9 of the previous Office Action dated April 20, 2006, the rejection of claims 1-2, 13-16, 20-24, 29-33, 37 and 41-43 remains proper and is **maintained**.

Art Unit: 1614

Conclusion

Rejection of claims 1-2, 13-24, 29-33 and 37-43 is proper and is maintained.

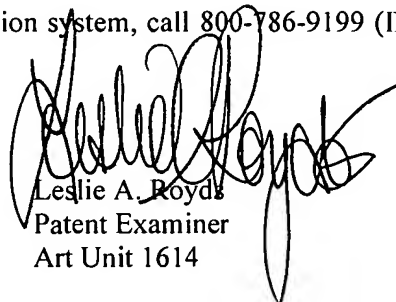
Claims 44-65 are withdrawn from consideration pursuant to 37 C.F.R. 1.142(b) and MPEP §821.03.

No claims of the present application are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie A. Royds whose telephone number is (571)-272-6096. The examiner can normally be reached on Monday-Friday (9:00 AM-5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on (571)-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Leslie A. Royds
Patent Examiner
Art Unit 1614

December 8, 2006

 12/9/06
ARDIN H. MARSCHEL
SUPERVISORY PATENT EXAMINER